Current 319(h) Projects

Fences installed help to manage grazing in the Pelekane Bay watershed.

CWA Section 319(h) Projects

During this fiscal year, the Polluted Runoff Control Program oversaw a number of projects aimed at reducing nonpoint source pollution in Hawaii. We were successful in funding projects on various islands including Kauai, Molokai, Hawaii, Maui, and Oahu. With a current contract pending for Lanai, the program is really making strides at making an impact throughout the state.



Apoha, the O'opu.
Our program's mascot!

Pelekane Bay (Phase II)

Contractor: Mauna Kea Soil and Water Conservation District

Project Period: July 1998 through December 2001

Federal Funds: \$115,100 (FY97) **Matching Funds:** \$81,814 **% of Project Completed:** 90 **% of Funds Remaining:** 10

Project Purpose/Goal: To reduce soil erosion and the pollution of Pelekane Bay, restore vegetation in the watershed, and work with landowners to improve grazing management.

Status: The project has improved grazing management by creating more, smaller paddocks, to facilitate movement of cattle and management of better maintained and healthier forage. The District has completed a Fire Management Plan for Pelekane Bay Watershed and with its implementation, hopes to address the problems that arise from fires in the watershed. Brochures describing the project to the community and an ongoing partnership with Hawaii Prep Academy's "Legacy Program" are beneficial educational products of the project. The Legacy Program is used to train students to use technologies to undertake natural resource inventory and management projects.

Mo'omomi Watershed Project

Contractor: Molokai-Lanai Soil & Water Conservation District

Project Period: May 1999 through December 2001

Federal Funds: \$50,900 (FY97) **Matching Funds:** \$51,900 **% of Project Completed:** 90 **% of Funds Remaining:** 6

Project Purpose/Goal: To reduce and control further degradation

to the quality of the soil, water, air, plants, and animals by implementing Best Management Practices.

Status: The District continues to work with the landowner to evaluate the use of mechanical measures to establish vegetation. The access road has been rerouted, however, more work to stabilize the roadway appears necessary. Brochures were developed to educate the



Soil eroded from adjacent land ends up in Mo'omomi Bay.

public on BMPs necessary in this watershed. The weather station data continues to be collected and documented. The project has had a very slow start, but the District feels it is necessary to complete the project to minimize the adverse impact on the ocean.

Demonstration and Training in Critical Area Stabilization Techniques on Agricultural Roads and Unprotected Waterways

Contractor: East Kauai Soil & Water Conservation District **Project Period:** September 1999 through December 2002

Federal Funds: \$67,623 (FY98) **Matching Funds:** \$67,623 **% of Project Completed:** 31 **% of Funds Remaining:** 73

Project Purpose/Goal: To reduce soil erosion and sedimentation and to educate agriculturalists in techniques that will reduce and prevent soil erosion by installing erosion and sedimentation improvements demonstrating installation and maintenance measures and transferring technology to agricultural landowners and land users on Kauai and statewide.

Status: With land ownership changes, weather set backs, a tunnel collapse, and a change in district personnel this FY, this project has been forced to revise their scope of services and budget.



Recycled tires and geo cells are used to stabilize this earthen bank.

Student Water Quality Monitoring Program

Contractor: Department of Education

Project Period: November 1999 through December 2001

Federal Funds: \$220,000 (FY98) **Matching Funds:** \$146,550

% of Project Completed: 85 % of Funds Remaining: 37

"I am not afraid of storms, for I am learning how to sail my ship" ~Louisa May Alcott

Project Purpose/Goal: To create a feeling of responsibility to the environment to reduce nonpoint source pollution by improving delivery of instruction to schools by developing a water quality monitoring training program for teachers.

Status: Although workshops took place throughout FY 01, the teacher's strike in April 2001 forced several workshops to be cancelled. Partnerships have been established with the Waikiki Aquarium and the University of Hawaii's Sea Grant Extension Service. The Hawaii Watershed website database continues to be upgraded with visualization technology. The project has produced a base of Master Cadre teachers who will provide future workshops beyond the scope of this project.

Cover Crops for Erosion Control in Ko'olaupoko Area

Contractor: Hawaii Agriculture Research Center (HARC) **Project Period:** December 1999 through November 2001

Federal Funds: \$11,000 (FY99) Matching Funds: \$14,000 % of Project Completed: 60 % of Funds Remaining: 40

Project Purpose/Goal: To provide soil protection using cover crops.

Status: The first field days were completed in April 2001 and the ground cover for the second field day has been planted. HARC wants to extend the project into the spring, when the plants would be older and a better size for viewing at the field day. Data is currently being collected regarding the ground cover being planted.



Sandalwood ground cover surrounding a young Koa Tree.

Hawaii's Polluted Runoff Control Program's Annual Report 2001

Salt Lake Watershed Improvement Program

Contractor: City & County of Honolulu

Project Period: December 1999 through October 2001

Federal Funds: \$20,000 (FY99) Matching Funds: \$29,000 % of Project Completed: 35 % of Funds Remaining: 66

Project Purpose/Goal: To reduce silt build up and odor through monitoring, educational outreach programs, and limiting the use of drain inlet inserts, filtration devices, and chemical and biological treatments.

Status: Water samples are still being taken and analyzed from the waterway surrounding the golf course. Problems with dredging have occurred causing the project to be delayed. Currently they have requested an contract extension.



This waterway located on the Honolulu Country Club is over populated with algae that cuts off circulation and creates a foul odor for residents.

Pearl Harbor Watershed Environmental Restoration Projects

Contractor: University of Hawaii, Leeward Community College (LCC)

Project Period: April 2000 through February 2002

Federal Funds: \$55,000 (FY99) Matching Funds: \$55,000

% of Project Completed: 90 % of Funds Remaining: 75

Project Purpose/Goal: To reduce nonpoint source pollution caused by urbanization by surveying and monitoring the impact of urban growth and implementing Best Management Practice (BMPs) such as field surveys, clean-ups, and erosion and sediment control structures.

Status: The project continues to make progress with establishing partnerships within the community. To date over 20 partnerships have been made.



LCC overlook

Quarterly stream clean-ups continue, as well as data collection for stream monitoring. Organization, analysis, and interpretation of the collected data also continues.

Waters of Kawainui Marsh: An Educational/Interactive Website (www2.lanikai.k12.hi.us/waters.htm)

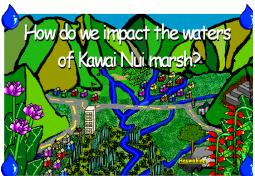
Contractor: Learning Education Technology

Project Period: January 2000 through December 2001

Federal Funds: \$29,310 (FY99) **Matching Funds:** \$52,108 **% of Project Completed:** 95 **% of Funds Remaining:** 14

Project Purpose/Goal: To increase awareness of polluted runoff and to increase knowledge of what may contribute to polluted runoff going into the marsh by creating an interactive website.

Status: The website has been up for almost a year now and has been receiving outstanding reviews. The website contains information regarding Kawainui Marsh and its watershed. Information ranges from data collected



Lanikai Elementary School won the 2001 Gold Award at the International CyberFair.

in the field, to the history of the area, to the causes of nonpoint source pollution in the watershed. A survey is currently being created and distributed to parents of students so that the project can get feedback.

The (Ko'olaupoko) Watershed Restoration Corp

Contractor: Waimanalo Health Center

Project Period: June 2000 through November 2002

Federal Funds: \$80,000 (FY99) **Matching Funds:** \$80,000 **% of Project Completed:** 50 **% of Funds Remaining:** 46

Project Purpose/Goal: To reduce sediment and nutrients from entering streams from eroding banks by planting vegetation along stream banks.

Status: The project has been very successful in revegetating portions of the stream banks in Waimanalo Stream. The native plants that have been planted over the summer are still flourishing and weeding at one site has been reduced to only a monthly maintenance. Currently, Waimanalo Health Center is looking for a new project manager to replace Lisa Ferentinos who recently resigned her position with the project.



Waimanalo Stream is slowly beginning to once again be regarded as a stream, not simply a storm water channel.

Kalihi Community Resource Improvement Stream Project

Contractor: Hawaii's Thousand Friends

Project Period: August 2000 through August 2002

Federal Funds: \$30,000 (FY99) Matching Funds: \$30,000

% of Project Completed: 55 % of Funds Remaining: 22

Project Purpose/Goal: To restore Kalihi stream back to a central asset of the community through education, stream bank restoration, and by creating and distributing an educational video.

Status: The educational video has been produced and there has been a high demand for it from the Kalihi area. Test plots have been established to see what species of native plants will be most effective to control ero-



Kalihi Stream

sion in Kalihi Stream's environment. Once determined, they will be planted along the stream bank to reduce erosion and create a better environment for the animals living in the stream.

Increasing Public Awareness of Pollution Risks Using Farm*A*Syst/Home*A*Syst

Contractor: University of HI, College of Tropical Agriculture and Human Resources

Project Period: September 2000 through February 2002

Federal Funds: \$64,690 (FY99) **Matching Funds:** \$64,291 **% of Project Completed:** 40 **% of Funds Remaining:** 96

Project Purpose/Goal: To increase public awareness of nonpoint source pollution risks through educational workshops and self assessment worksheets.

Hawaii's Pollution Prevention Information (HAPPI)

Status: HAPPI materials and are still being distributed to the community at events, including neighborhood board meetings, watershed festivals, and SWCD meetings. Informational flyers about the project were made and are in the process of being distributed throughout the state public library system. Furthermore, NRCS has agreed to distribute and use HAPPI materials as a pre-conservation plan planning tool.

Waianae Coast Community-Based Watershed Management Program (Phase II)

Contractor: City & County of Honolulu

Project Period: September 2000 through March 2002

Federal Funds: \$35,000 Matching Funds: \$42,000 % of Project Completed: 30 % of Funds Remaining: 100

Project Purpose/Goal: To reduce pollution by increasing a sense of stewardship through outreach, storm drain stenciling, clean-ups, by creating and distributing educational brochures and videos, and establishing a website.

Status: Drafts of the educational video and brochures have been produced and are currently being edited and finalized. Stream monitoring by Waianae High School students continues, as well as the anonymous telephone line for



Debris barrier booms installed by the City & County of Honolulu in Ulehawa Stream.

illegal dumping sponsored by Nani O Waianae. This project has also helped organize several clean ups and educational events. Also, debris booms installed in stream channels by the City and County of Honolulu have helped to reduce the influx of trash into the ocean.

West Maui SWCD Best Management Plan Improvement on Maui

Pineapple Co. and Pioneer Mill Co. Land

Contractor: West Maui Soil & Water Conservation District

Project Period: April 2000 through July 2002

Federal Funds: \$285,000 (FY99) Matching Funds: \$90,000 % of Project Completed: 50 % of Funds Remaining: 53

Project Purpose/Goal: To reduce further degradation of near coastal waters by constructing sediment retention basins and enhancing current BMPs.

Status: To date, this project has begun modifications on several sediment retention basins and drainage ways, constructed terraces, and installed culverts. PRC staff conducted a site visit and acknowledged the great potential



One of the many BMPs installed on to help control polluted run-off.

impact runoff from this area could have on the West Maui coast if BMPs are not installed and maintained.

Nawiliwili Bay Watershed Restoration

Contractor: Pacific Islands Sustainable Community Ecosystems (PISCES)

Project Period: June 2001 through December 2002

Federal Funds: \$64,000 (FY00) **Matching Funds:** \$69,000 **% of Project Completed:** 10 **% of Funds Remaining:** 96

Project Purpose/Goal: To demonstrate BMPs that will improve water quality, implement educational and water quality assessment programs, develop videos, and install and monitor storm drain inserts.

Status: PISCES held their first Watershed festival and Water Quality workshop in September. Currently they are working on establishing a volunteer community based water quality monitoring program and a watershed committee that will help facilitate the development of a WRAS for Nawiliwili Bay.

Sanitary Sewer Overflow Protection

Contractor: Hawaii Water Environment Association (HWEA)

Project Period: August 2001 through June 2003

Federal Funds: \$30,000 (FY00) **Matching Funds:** \$41,000 **% of Project Completed:** 5 **% of Funds Remaining:** 100

Project Purpose/Goal: To develop a Public Service Announcement (PSA) to educate the public about the causes of sewage spills, the impacts of sewage spills to public health and the associated monetary costs to sewer users, and the important role of the public in minimizing the occurrence of sewage spills.

Status: Preliminary organizational meetings have been held, a target audience has been identified, and a media consultant has been chosen to produce the public service announcement.

He'eia Coastal Restorations Project

Contractor: Friends of He'eia State Park

Project Period: May 2001 through December 2002

Federal Funds: \$84,000 (FY00) Matching Funds: \$84,000 % of Project Completed: 40 % of Funds Remaining: 85

Project Purpose/Goal: To reduce nonpoint source pollution entering Kaneohe Bay through He'eia stream by planting vegetation along stream banks and removing alien flora from the immediate area.

Status: This project has been successful in removing invasive Mangroves with the help of project staff and volunteers throughout the community. Test plots are being grown to determine what native plant species will flourish along He'eia stream. Stream monitoring for various parameters



Invasive Mangroves have grown into the stream and impede the stream flow.

including pH, total suspended solids, nitrate, nitrite, and other data collection continues monthly. Friends of He'eia State Park have also given several presentations at local neighborhood boards and to the community at large regarding their project's goals and benefits and about nonpoint source pollution in general.

HACD Water Quality Discretionary Grant

Contractor: Hawaii Association of Conservation Districts

Project Period: September 2001 through May 2002

Grant Awarded: \$45,000 (FY01) **Matching Funds:** \$45,000 % of Project Completed: 0 % of Funds Remaining: 92

Project Purpose/Goal: To educate and encourage the prevention of nonpoint source pollution by planning and coordinating water quality workshops.

Status: This contract was executed in September 2001, and has yet to complete any tasks in their scope of services.

319(h) Projects Still in Contract Process

Lanai Watershed Restoration

Contractor: Department of Water Supply, County of Maui

Project Period: 24 months

Federal Funds: \$50,000 (FY99) Matching Funds: \$50,000

Project Purpose/Goal: To restore Lanai Watershed by preventing further loss of soil and reducing nutrient loads of near shore waters through planting ground cover, installing fencing, and removing weeds that increase fire hazard or that do not provide good erosion protection.

Status: The contract was sent to the Department of Water Supply, County of Maui for execution on September 19, 2001. The estimated date for issuance of the notice to proceed is October 19, 2001.

HACD Agricultural Roads Stabilization

Contractor: Hawaii Association of Conservation Districts

Project Period: 12 months

Federal Funds: \$60,000 (FY99) Matching Funds: \$60,000

Project Purpose/Goal: To establish demonstration sites throughout the state to measure the effectiveness of various soil and fiber amendments available in the commercial market for reducing erosion and dust production from agricultural roads.

Status: The contract was sent to the Hawaii Association of Conservation Districts for execution on September 10, 2001. The estimated date for issuance of the notice to proceed is October 4, 2001.

Cancelled Projects

Statewide Polluted Runoff Control Education and Mapping

Contractor: Youth for Environmental Services (YES)

Project Period: 24 months

Federal Funds: \$68,720 (FY00) Matching Funds: \$163,120

Project Purpose/Goal: To protect environmental endeavors and to increase the social value of streams, estuaries, bays, and the ocean by educating students on how water bodies function, the role of water in a natural ecosystem, impacts of degraded water quality in areas within local neighborhoods, and introducing GPA/GIS technologies to emphasize these systems.

Status: The YES organization ceased activity in the state of Hawaii and no other organization or agency appears capable of fulfilling this contract's requirements. The PRC program is considering another project for these funds.